



**[4910-13-P]**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2013-0489; Directorate Identifier 2008-SW-003-AD;**

**Amendment 39-18175; AD 2015-12-02]**

**RIN 2120-AA64**

**Airworthiness Directives; Bell Helicopter Textron Canada Limited**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain Bell Helicopter Textron Canada Limited (Bell) Model 206L-1, 206L-3, and 206L-4 helicopters. This AD requires installing a placard and revising the limitations section of the rotorcraft flight manual (RFM). This AD was prompted by several incidents of third stage engine turbine wheel failures caused by excessive vibrations at certain engine speeds during steady-state operations. The actions of this AD are intended to prevent turbine failure, engine power loss, and subsequent loss of control of the helicopter.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this AD, contact Bell Helicopter Textron Canada Limited, 12,800 Rue de l'Avenir, Mirabel, Quebec J7J1R4;

telephone (450) 437-2862 or (800) 363-8023; fax (450) 433-0272; or at <http://www.bellcustomer.com/files/>. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the supplemental type certificate (STC), the Transport Canada Civil Aviation (TCCA) AD, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (phone: 800-647-5527) is U.S. Department of Transportation, Docket Operations Office, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** James Blyn, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email [james.blyn@faa.gov](mailto:james.blyn@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Discussion**

On June 7, 2013, at 78 FR 34282, the Federal Register published our notice of proposed rulemaking (NPRM), which proposed to amend 14 CFR part 39 by adding an AD that would apply to certain Bell Model 206L-3 and 206L-4 helicopters. The NPRM proposed to require installing a placard on the instrument panel below the dual tachometer and revising the Operating Limitations section of the Model 206L-3 and

206L-4 RFMs by inserting pages that limit steady-state operations between speeds of 71.8% and 91.5%. The proposed requirements were intended to prevent turbine failure, engine power loss, and subsequent loss of control of the helicopter.

The NPRM was prompted by TCCA AD No. CF-2005-28R1, dated June 14, 2007, to correct an unsafe condition for certain Model 206L-3 and 206L-4 helicopters. TCCA, which is the aviation authority for Canada, advises of several failures of third stage turbine wheels used in Rolls-Royce 250-C30S and 250-C47B engines. According to TCCA, Rolls-Royce determined that detrimental vibrations can occur within a particular range of turbine speeds, and may be a contributing factor to these failures. Bell has revised the RFM and provided a corresponding decal to inform pilots to avoid steady-state operations between 71.8% and 91.5% turbine speeds. The TCCA AD requires amending the RFMs, advising pilots of the change, and installing a decal as described in Bell Alert Service Bulletin (ASB) No. 206L-05-134, dated June 8, 2005, or later revisions.

On October 3, 2014, at 79 FR 59695, the Federal Register published our supplemental notice of proposed rulemaking (SNPRM), which proposed to revise the applicability and change the procedures for updating the RFM. The SNPRM proposed adding Bell Model 206L-1 helicopters with Engine Upgrade Kit part number (P/N) 206-706-520 installed, to the applicability. Engine Upgrade Kit P/N 206-706-520 replaces the Rolls-Royce 250-C28B engine with a Rolls-Royce 250-C30P engine. The condition causing the failures of third stage turbine wheels used in Rolls-Royce 250-C30S and 250-C-47B engines could also exist in Rolls-Royce 250-C30P engines. The SNPRM also proposed removing Bell Model 206L-3 and 206L-4 helicopters having Rolls-Royce 250-

C20R engines installed under STC No. SR00036SE from the applicability because that engine is not affected by the unsafe condition. The SNPRM also proposed changing the procedures for modifying the RFM Limitations Section from inserting revised RFM pages to inserting a copy of this AD into the RFM or by making pen and ink changes.

### **Comments**

We gave the public the opportunity to comment on the SNPRM (79 FR 59695, October 3, 2014) but we received no comments.

### **FAA's Determination**

These helicopters have been approved by the aviation authority of Canada and are approved for operation in the United States. Pursuant to our bilateral agreement with Canada, TCCA, its technical representative, has notified us of the unsafe condition described in the TCCA AD. We are issuing this AD because we evaluated all information provided by TCCA, reviewed the relevant information, considered the comment received, and determined the unsafe condition exists and is likely to exist or develop on other helicopters of these same type designs and that air safety and the public interest require adopting the AD requirements as proposed.

### **Differences Between this AD and the TCCA AD**

The TCCA AD requires compliance within 10 calendar days; this AD requires compliance within 30 days. This AD is applicable to Model 206L-1 helicopters with Engine Upgrade Kit P/N 206-706-520 installed because the same unsafe condition exists on this model, and the TCCA AD is not.

### **Related Service Information**

Bell issued ASB No. 206L-05-134, Revision A, dated April 9, 2007, which describes procedures for installing a placard on the instrument panel below the main rotor RPM (Nr) / power turbine RPM (N2) dual tachometer and for inserting the RFM changes into the flight manual. Revision A of the ASB was issued to exclude Bell Model 206L-3 and 206L-4 helicopters with 250-C20R engines installed under STC No. SR00036SE from the requirements of the ASB.

### **Costs of Compliance**

We estimate that this AD will affect 616 helicopters of U.S. Registry. We estimate that operators may incur the following costs in order to comply with this AD. Based on an average labor rate of \$85 per work-hour, amending the RFM requires about 0.5 work-hour, for a cost per helicopter of about \$43 and a cost to U.S. operators of \$26,488. Installing the decal requires about 0.2 work-hour, and required parts cost \$20, for a cost per helicopter of \$37 and a cost to U.S. operators of \$22,792. Based on these estimates, the total cost of this AD is \$80 per helicopter and \$49,280 for the fleet.

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds

necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on helicopters identified in this rulemaking action.

### **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866;
- (2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
- (3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

## **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2015-12-02 **Bell Helicopter Textron Canada Limited (Bell)**: Amendment 39-18175;

Docket No. FAA-2013-0489; Directorate Identifier 2008-SW-003-AD.

#### **(a) Applicability**

This AD applies to the following helicopters, certificated in any category:

(1) Bell Model 206L-1 with an Engine Upgrade Kit part number (P/N) 206-706-520-101 installed;

(2) Bell Model 206L-3, serial number (S/N) 51001 through 51612, except those with a Rolls-Royce 250-C20R engine installed under Supplemental Type Certificate (STC) No. SR00036SE; and

(3) Bell Model 206L-4, S/N 52001 through 52313, except those with a Rolls-Royce 250-C20R engine installed under STC No. SR00036SE.

#### **(b) Unsafe Condition**

This AD defines the unsafe condition as a third stage turbine vibration, which could result in turbine failure, engine power loss, and subsequent loss of control of the helicopter.

**(c) Effective Date**

This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(d) Compliance**

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

**(e) Required Actions**

Within 30 days:

(1) Install placard P/N 230-075-213-117, or equivalent, on the instrument panel directly below the dual tachometer.

(2) Revise the Operating Limitations section of the Rotorcraft Flight Manual (RFM) by inserting a copy of this AD into the RFM or by making pen and ink changes as follows:

(i) In the Power Plant section, beneath the Power Turbine RPM header, add:  
Avoid continuous operations 71.8% to 91.5%.

(ii) In the Placards and Decals section, add: “AVOID CONT OPS 71.8% TO 91.5% N2” with the location identification “Location: Instrument Panel.”

**(f) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: James Blyn, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email james.blyn@faa.gov.



(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

**(g) Additional Information**

(1) Bell Alert Service Bulletin No. 206L-05-134, Revision A, dated April 9, 2007, which is not incorporated by reference, contains additional information about the subject of this AD. For service information identified in this AD, contact Bell Helicopter Textron Canada Limited, 12,800 Rue de l'Avenir, Mirabel, Quebec J7J1R4; telephone (450) 437-2862 or (800) 363-8023; fax (450) 433-0272; or at <http://www.bellcustomer.com/files/>. You may review a copy of the service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

(2) STC No. SR00036SE, amended October 20, 1995; and reissued January 23, 2014, may be found on the Internet at <http://www.regulations.gov> in Docket No. FAA-2013-0489.

(3) The subject of this AD is addressed in Transport Canada Civil Aviation (TCCA) AD No. CF-2005-28R1, dated June 14, 2007. You may view the TCCA AD on the Internet at <http://www.regulations.gov> in Docket No. FAA-2013-0489.

**(h) Subject**

Joint Aircraft Service Component (JASC) Code: 7250, Turbine Section.

Issued in Fort Worth, Texas, on May 29, 2015.

Lance T. Gant,

Acting Directorate Manager, Rotorcraft Directorate,  
Aircraft Certification Service.

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